drooping, comparatively large; tongue, ocelli, and maxillary palpi invisible; forehead with a projecting fringe of hairy scales; antennæ broken; hind tibiæ with a broad expanding tuft of hairs in the middle.

Type Isopteryx discoloralis, Wlk. xxxiv. p. 1315.

[To be continued.]

## LVIII.—On the Galapagos Lizards of the Genus Tropidurus. By G. A. BOULENGER.

I HAVE lately reexamined the specimens of Tropidurus brought home by Darwin and Commander Cookson, with the view of testing the value of the supposed new species from the Galapagos Islands recently described by Cope \* and by Baur †. The specimens known from the Galapagos Islands were referred by Steindachner and myself to two species, T. Grayi, Bell, and T. pacificus, Stdr., the form with two light dorsal stripes described by Peters in 1871, from Chatham Island, as Craniopeltis bivittata being regarded as a variety of T. Grayi. It is this very form which has been redescribed, from the same island, by Cope under the name of Tropidurus lemniscatus, sp. n., without any reference whatever to Peters's description. What is almost worse is Baur's bold statement, "Üeber Tropidurus (Craniopeltis) livittatus (sic), Peters, dessen Fundort unbekannt ist t, kann ich kein Urteil abgeben." Is it too much to expect from herpetologists in America that they will look up the literature, and avoid quoting, as if seen by them, works to which they have not referred, as is evidently the case with Dr. Baur? I should also like to know where the latter gentleman has found T. pacificus quoted by me from Albemarle. I do not believe in most of the characters set forward by Baur to distinguish different species in the different islands; his statements are to a great extent contradicted by the typical specimens themselves, as when he says that the striped form, from Chatham Island, has 55-61 scales round the middle of the body, and that the specimens with 65 scales

<sup>\*</sup> Proc. U. S. Nat. Mus. xii. p. 145 (1889).

<sup>†</sup> Biol. Centralbl. x. p. 475 (1890).

<sup>†</sup> Peters states in his original description, "Das einzige mir vorliegende Exemplar . . . . stammt von der Galapagosinsel Chatham" (MB. Berl. Ac. 1871, p. 645.)

502

mentioned by me will prove to belong to the Charles-Island form, which has no stripes, whereas as a matter of fact it is precisely our unique adult striped individual (T. bivittatus = lemniscatus) which has the 65 scales. Here again we see that Baur has omitted to refer to Bell's original description in the 'Zoology of the 'Beagle,' where T. Grayi is figured in a perfectly recognizable manner; otherwise he would not have been embarassed to guess whether the name Grayi was made to apply to the striped form rather than to the spotted one. And finally, whilst I trust nobody will contest the accuracy of the localities given by Commander Cookson, accompanied by dated labels, the specimens from Abingdon Island agree perfectly with Bell's T. Grayi and Steindachner's T. pacificus, forms held by Dr. Baur to be restricted to Charles and Bindloe respectively.

As the striped form, T. bivittatus (T. Grayi, spec. b, of my 'Catalogue'), appears to be distinguished constantly, apart from the coloration, by its larger scales on the sides of the neck and by the upper head-scales being more broken up, I think it best to restore it to the rank of a species distinct from T. Grayi. But I feel justified in rejecting all Baur's new species as based on mere slight varieties of T. Grayi and T. pacificus, as will appear from the following synonymy; I also give the number of scales round the middle of the body in the various specimens preserved in the British

Museum.

## 1. Tropidurus Grayi.

Leiocephalus Grayi, part., Bell, Zool. 'Beagle.' Rept. p. 24, pl. xiii. fig. 1 (1842).

Tropidurus Grayi, part., Steindachner, Festschr. 2001.-bot. Ges. Wien, 1876, p. 310, pl. ii. fig. 1; Bouleng. Cat. Liz. ii. p. 172 (1885).

Tropidurus albemarlensis, indefatigabilis, delanonis, duncanensis, Baur,

Biol. Centralbl. x. 1890, p. 478.

1. Darwin's specimen, the type figured by Bell. No doubt from Charles Island. 3. Sc. 63.

2. Darwin's specimen, probably from the same locality.

3. Sc. 65.

3. Ditto. J. Sc. 61.
 4. Ditto. J. Sc. 59.
 5. Ditto. P. Sc. 61.

6. Albemarle, Commander Cookson. 3. Sc. 57. 7. Abingdon, Commander Cookson. 3. Sc. 59.

## 2. Tropidurus bivittatus.

Leiocephalus Grayi, part., Bell, l. c. Craniopellis bivittata, Peters, Mon. Berl. Ac. 1871, p. 645. Tropidurus Grayi, part., Steind. l. c.; Bouleng. l. c. Tropidurus lemniscatus, Cope, Proc. U. S. Nat. Mus. xii. p. 145 (1889); Baur, l. c.

1. Darwin's specimen, probably from Chatham Island. 3. Sc. 65.

2. Ditto. Young. Sc. 57.

## 3. Tropidurus pacificus.

Tropidurus pacificus, Steind. l. c. p. 313, pl. ii. figs. 2 and 3; Bouleng. l. c. p. 173. Tropidurus abingdonii, Baur, l. c.

1. Abingdon Island, Commander Cookson. Sc. 91.

2. Ditto. J. Sc. 95.

# LIX.—On Anabiosis. By Prof. W. PREYER, of Berlin \*.

THE fact of anabiosis, i. e. the revivification of perfectly lifeless organisms and their parts, the condition of which differs from ordinary apparent death in the total suspension of the whole of the vital processes, was experimentally established by me more than twenty-five years ago; and since that time I have substantiated it in my lectures and various papers, and have also drawn attention to its great theoretical importance †. I attach especial weight to the proof which I have furnished of the difference between the two antitheses of life, namely:—

> i. Lifeless and capable of living = anabiotic. ii. Lifeless and incapable of living = dead.

\* Translated from the 'Biologisches Centralblatt,' Bd. xi. no. 1, Feb. 1,

1891, pp. 1-5.

† 'Der Kampf um das Dasein,' Bonn, 1869 (pp. 10, 39); 'Die Erforschung des Lebens,' Jena, 1873 (and 'Tageblatt der 45. Versammlung deutscher Naturforscher und Aertze,' Leipzig, 1872, p. 47); 'Naturwissenschaftliche Thatsachen u. Probleme, Berlin, 1880; 'Der Hypnotismus,' Berlin, 1882 (p. 282); 'Elemente der allgemeinen Physiologie,' Leipzig, 1883. Cf. "Ueber den Lebensbegriff" in the journal 'Kosmos' (i. Jahrg. ii. Bd. p. 213, Leipzig, 1878), and "Die Wiederbelebung totenstarrer Muskeln" (Amtl. Bericht über die 39. Versammlung deutscher Naturforscher und Aertze in Giessen, 1864, and 'Recueil des trayaux de la Société médicale allemande,' Paris, 1865). 34\*